

## CME analysis in depth assessment – week two, **ANSWERS**

For the CMEs listed below, follow the CME analysis procedure described in the lesson and also submit answers to the following questions for each CME:

CMEs starting at

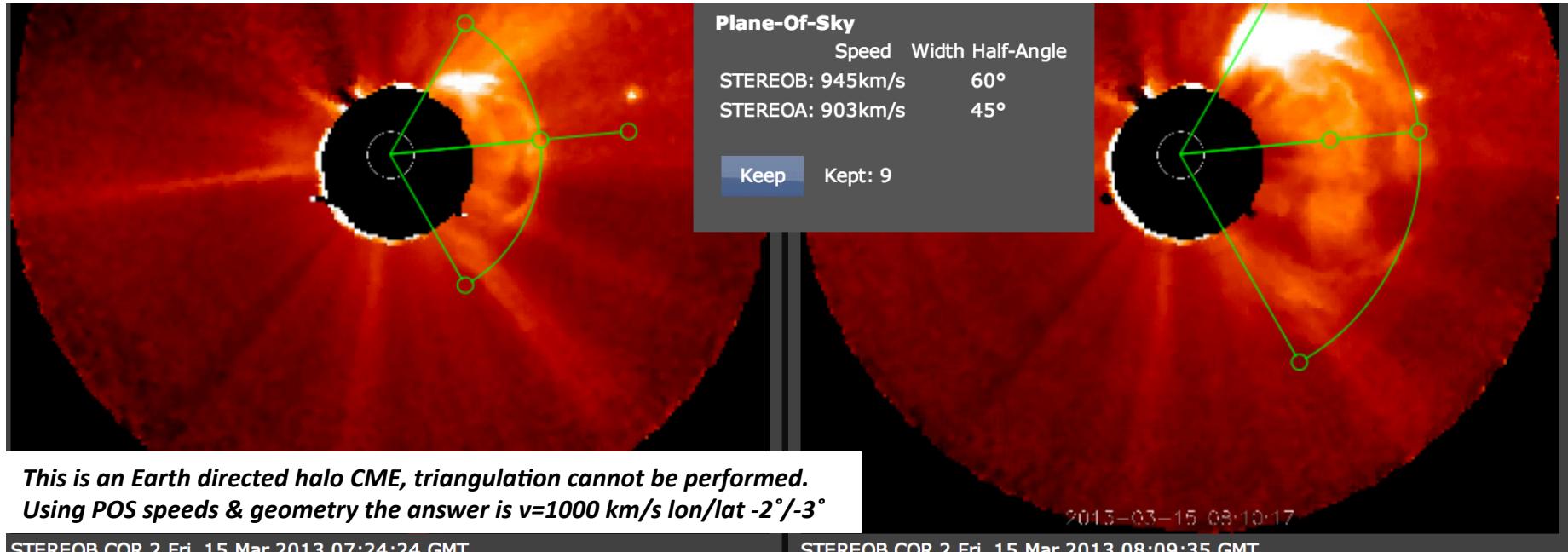
- 1) 2013-03-15T06:54Z
- 2) 2013-01-21T08:48Z
- 3) 2013-04-11T07:36Z
- 4) 2012-09-28T02:25Z
- 5) 2012-09-28T10:54Z
- 6) 2012-11-21T16:24Z

*Resources & iSWA layouts*

- \* CME analysis tool: <http://ccmc.gsfc.nasa.gov/analysis/stereo/>
- \* 40 Frame coronagraph and EUV movies <http://go.nasa.gov/16bTvzK>
- \* Where is STEREO? [http://stereo-ssc.nascom.nasa.gov/cgi-bin/make\\_where\\_gif](http://stereo-ssc.nascom.nasa.gov/cgi-bin/make_where_gif)
- \* Solar Images with grid overlays <http://www.solarmonitor.org/>

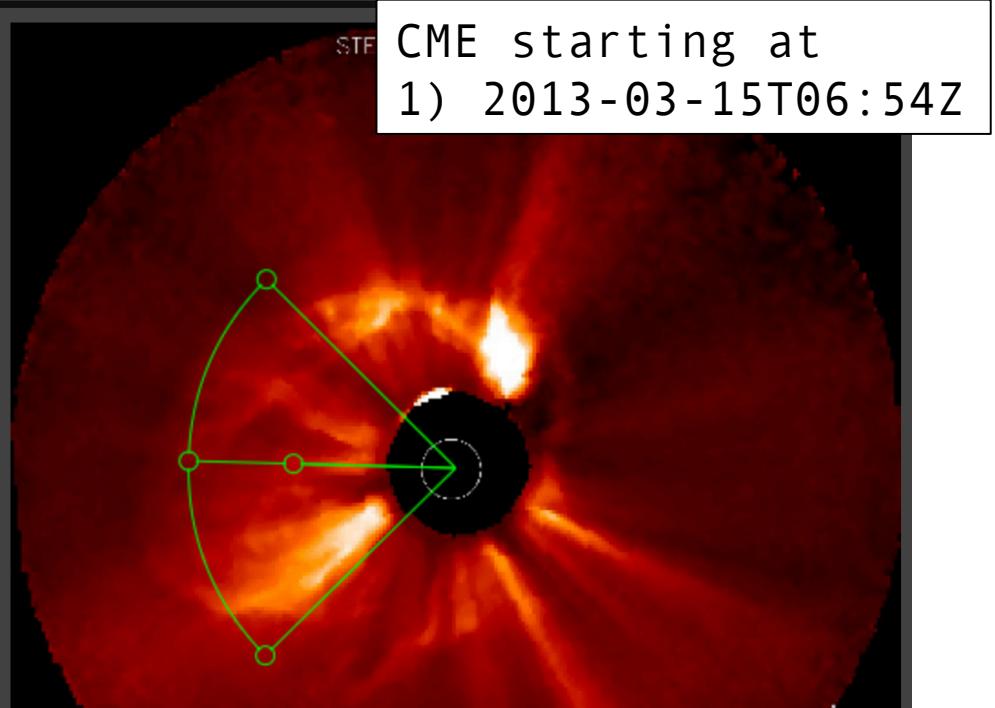
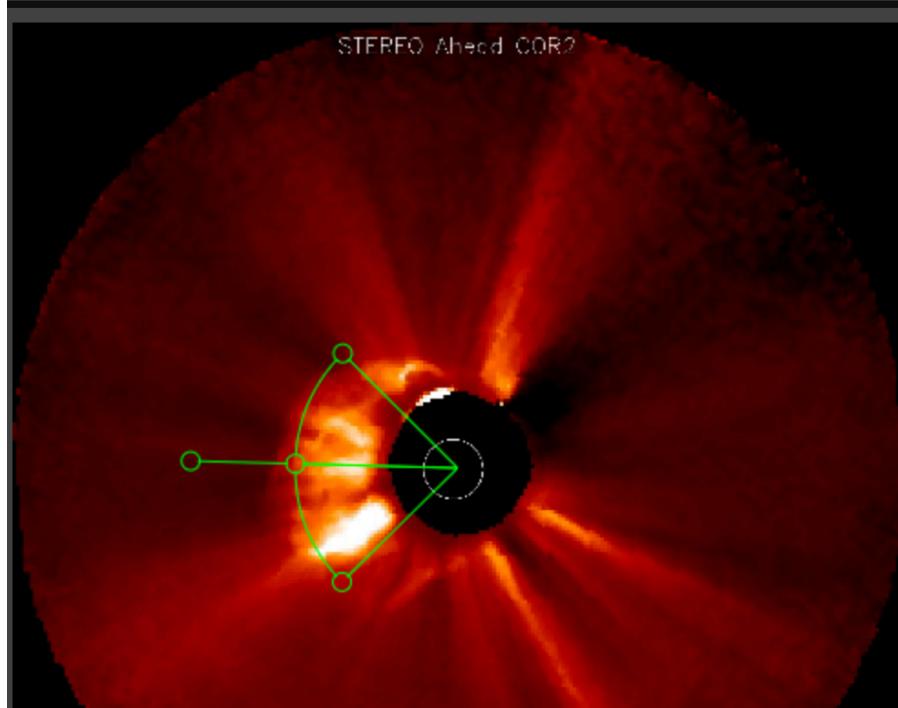
Fill out the form: <http://bit.ly/swcme2>

- a) What is the source location for this CME? (list the location e.g. N15E20, instrument/wavelength, and time of the observation).
- b) Describe the EUV lower coronal signature for this CME (e.g. flare, post eruption arcade/loops, rising loops, dimming, filament eruption).
- c) Is the CME a halo in any of the coronagraphs? If so, is it moving away from or towards the observer?
- d) Which coronagraph instrument first observed the CME at the start time?
- e) What are your final **CME parameters** (radial speed, half width, longitude, latitude, and time at 21.5 Rs (solar radii)).
- f) Submit your “Save URL” of your measurements.

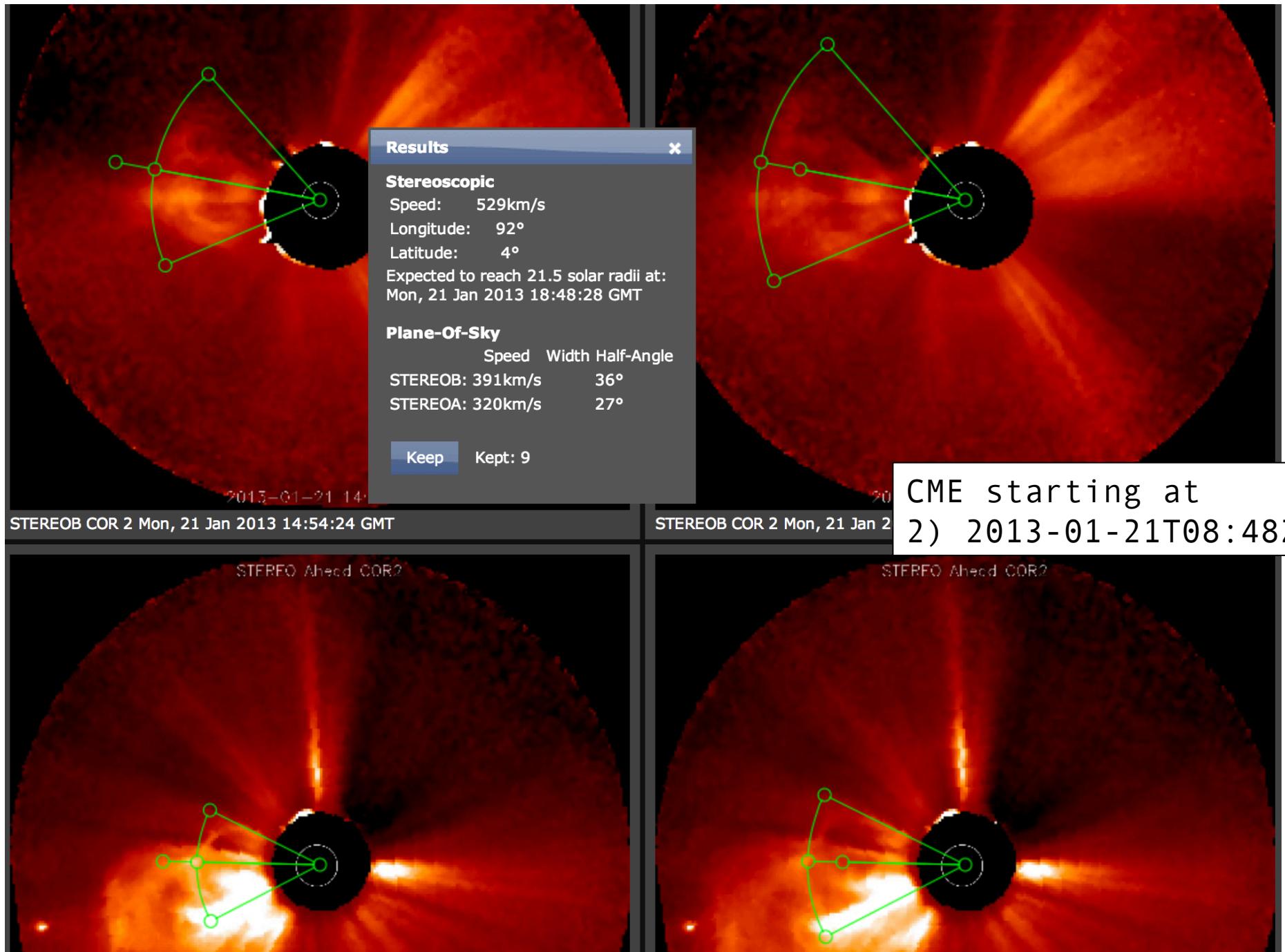


STEREOB COR 2 Fri, 15 Mar 2013 07:24:24 GMT

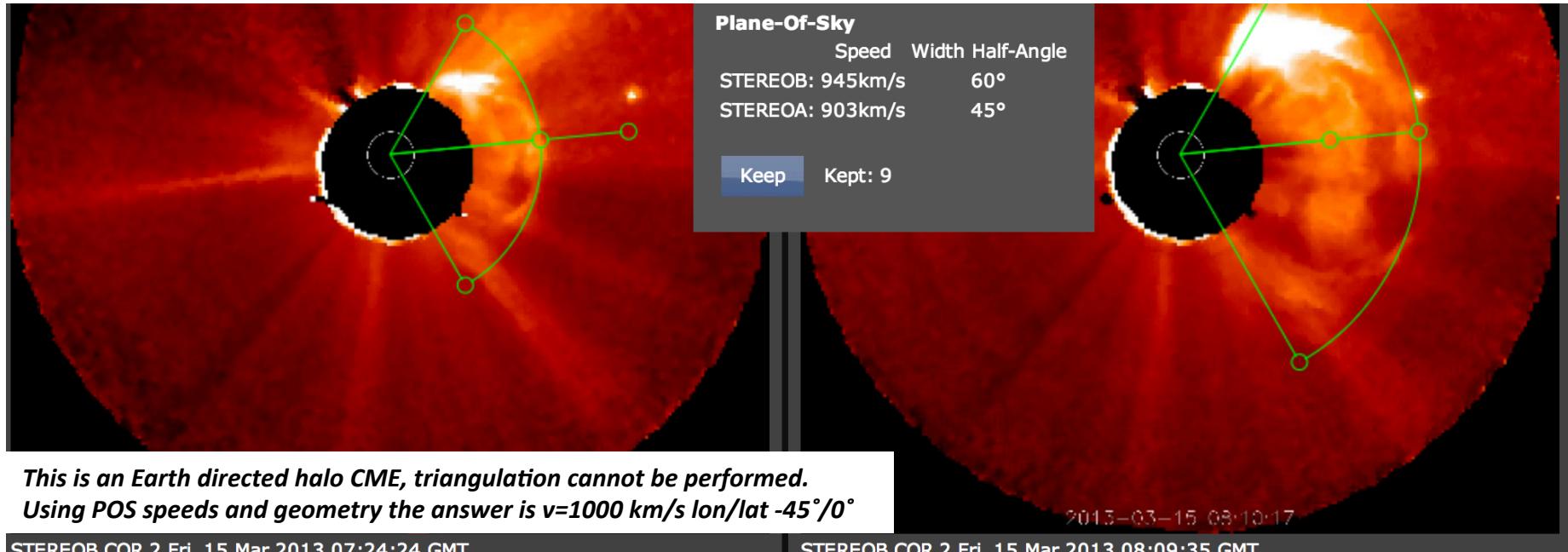
STEREOB COR 2 Fri, 15 Mar 2013 08:09:35 GMT



CME analysis assessment, week two – approximate starting answers

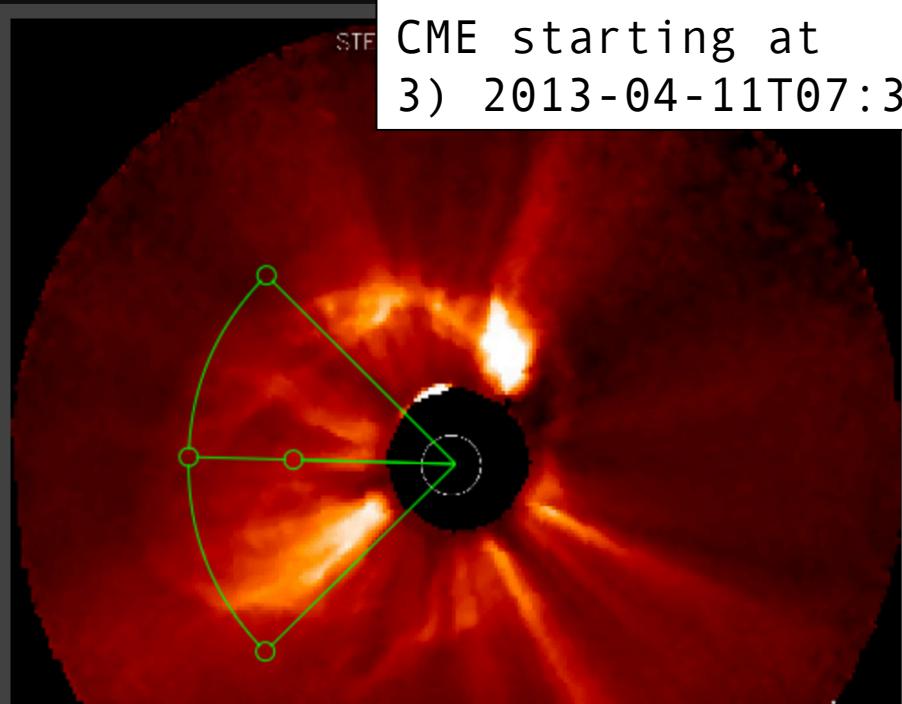
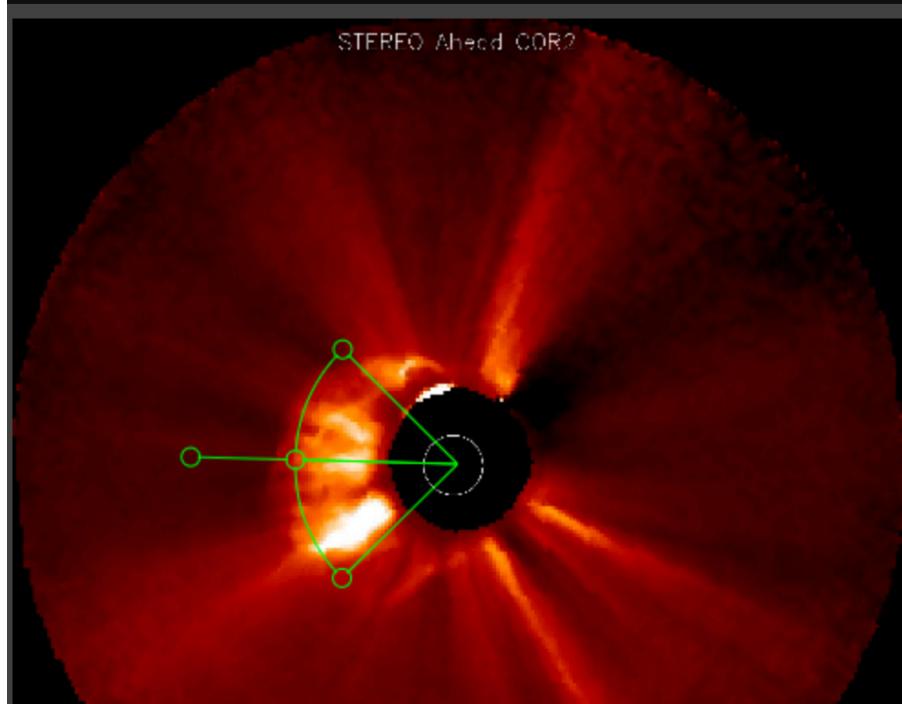


CME analysis assessment, week two – approximate starting answers

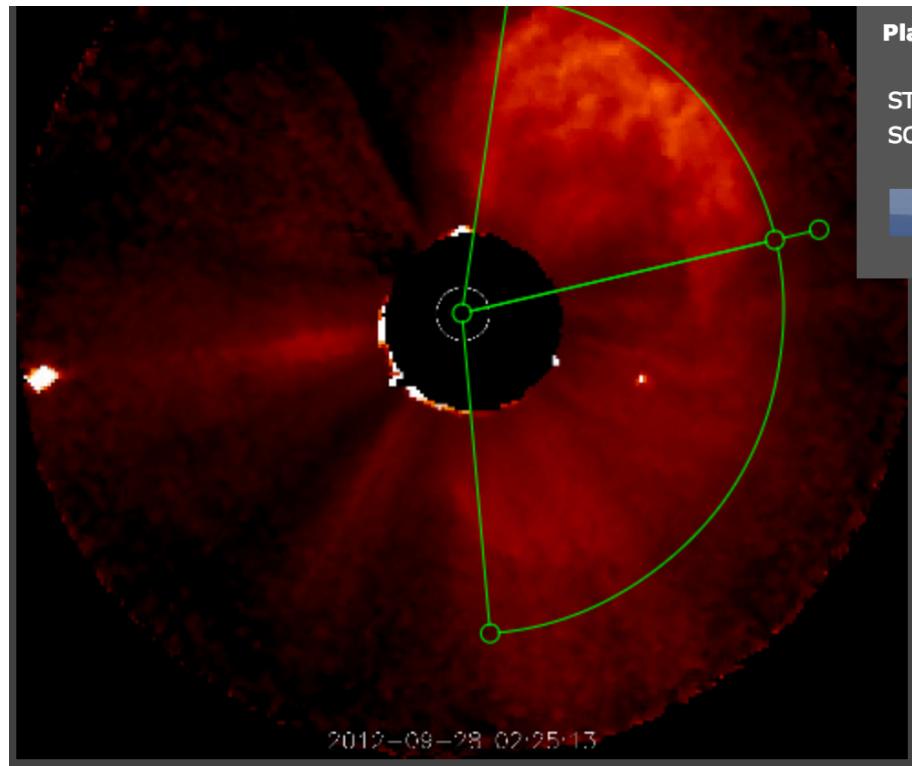


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STEREOB COR 2 Fri, 15 Mar 2013 08:09:35 GMT



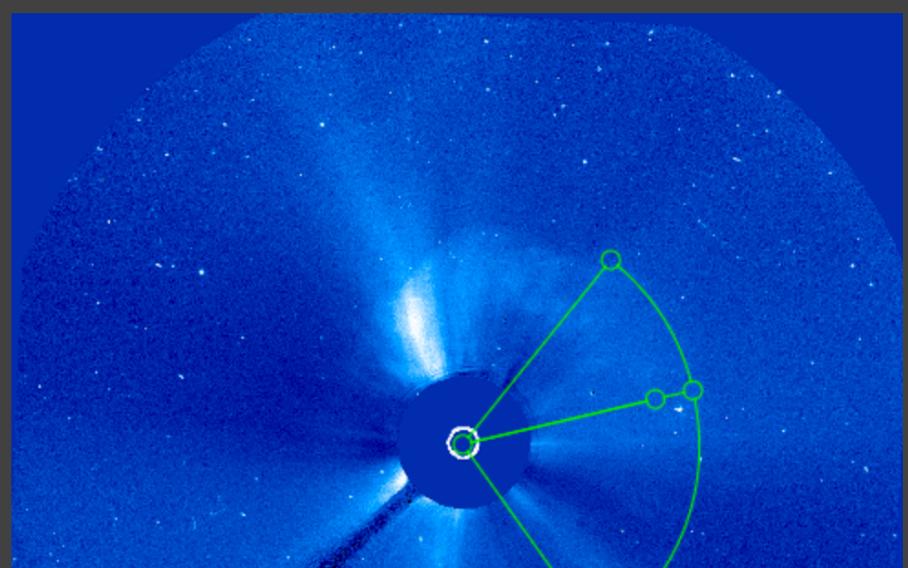
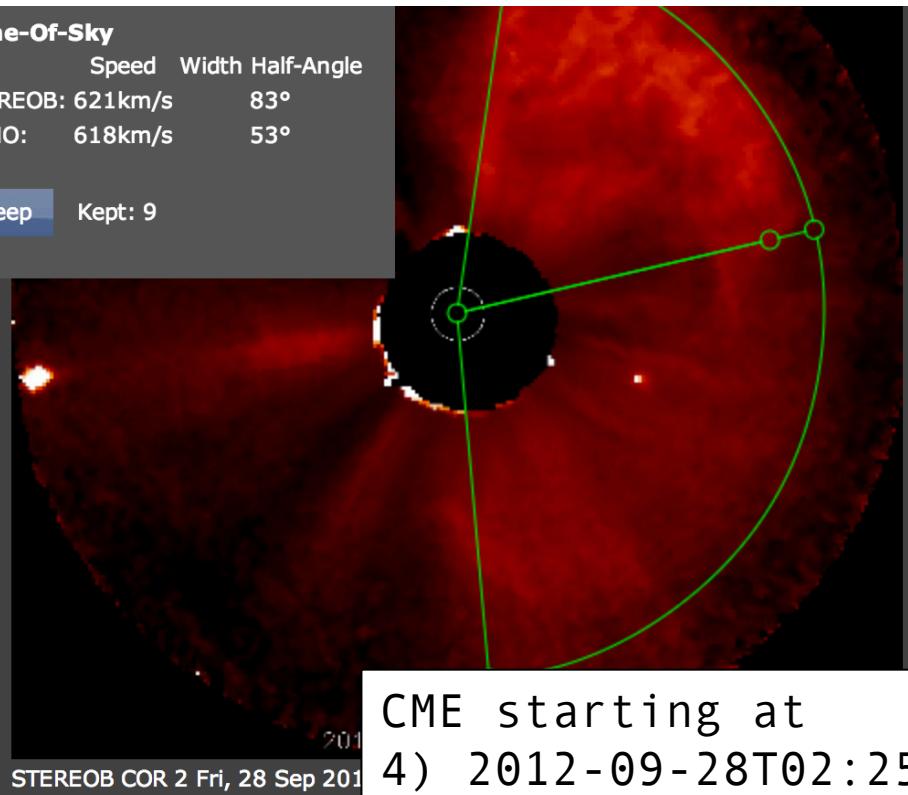
CME analysis assessment, week two – approximate starting answers



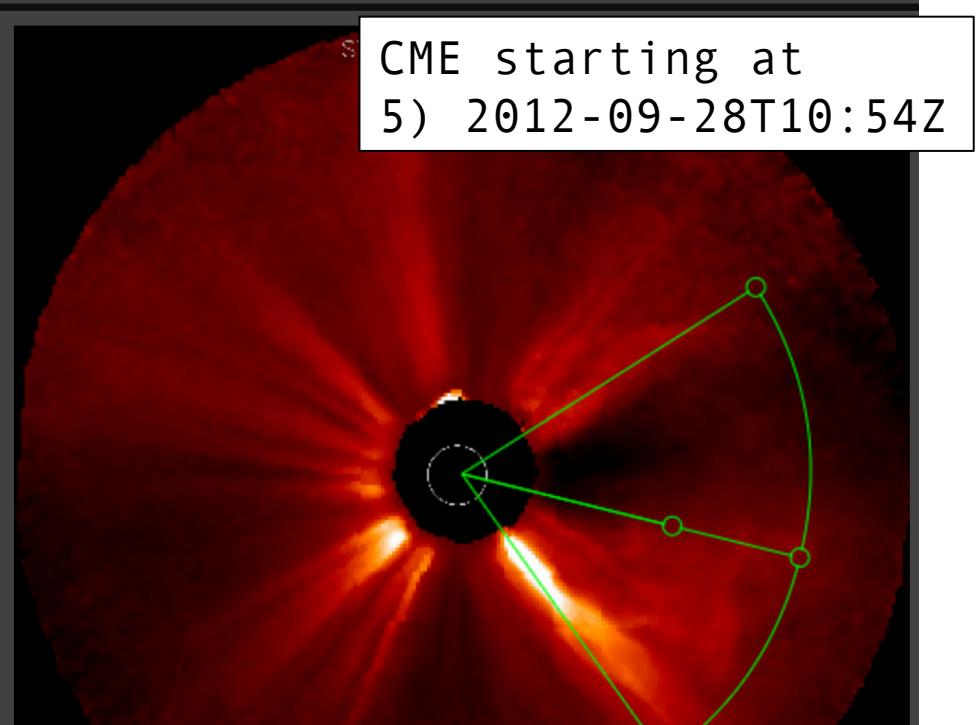
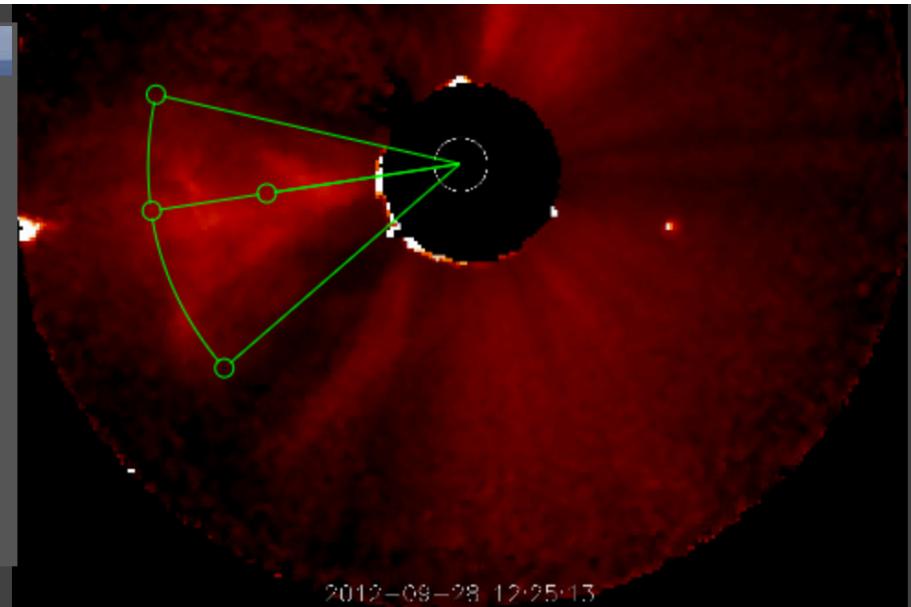
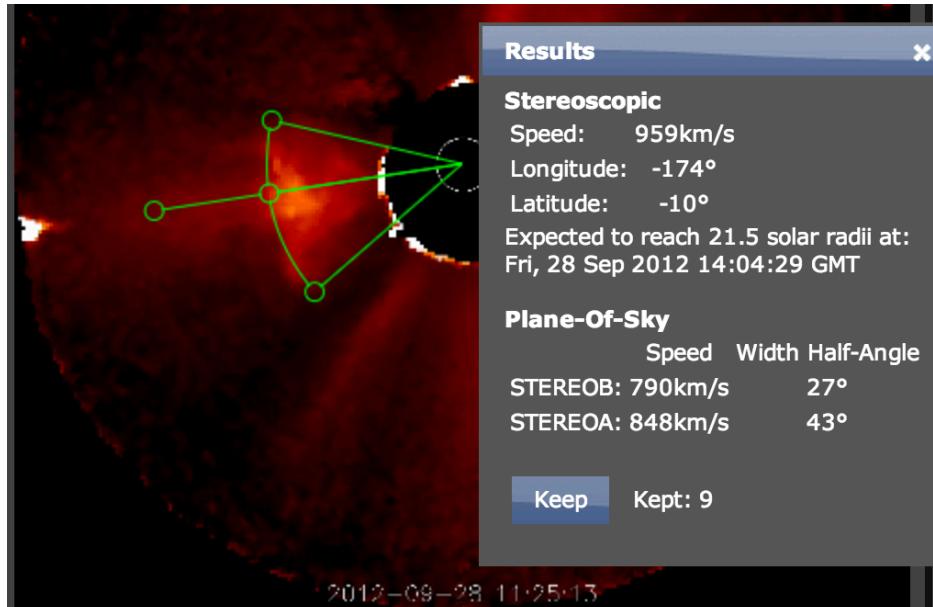
**Plane-Of-Sky**

Speed	Width	Half-Angle
STEREOB: 621km/s	83°	
SOHO: 618km/s	53°	

Keep Kept: 9

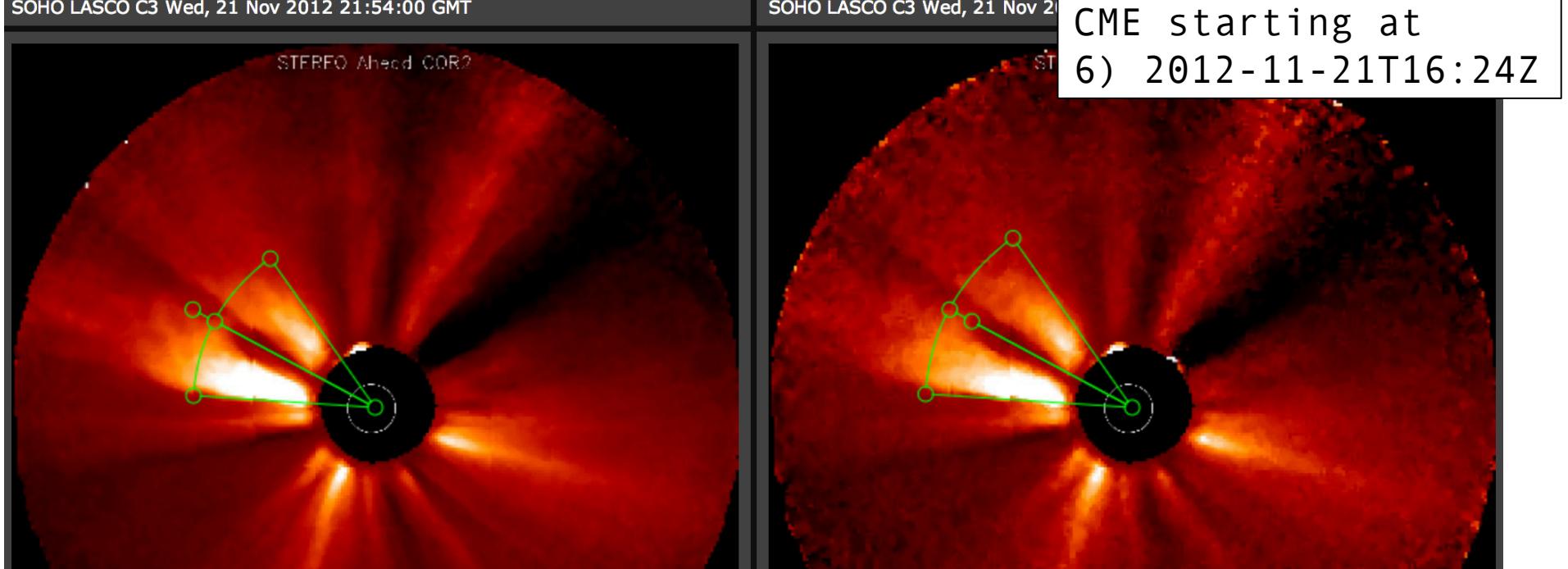
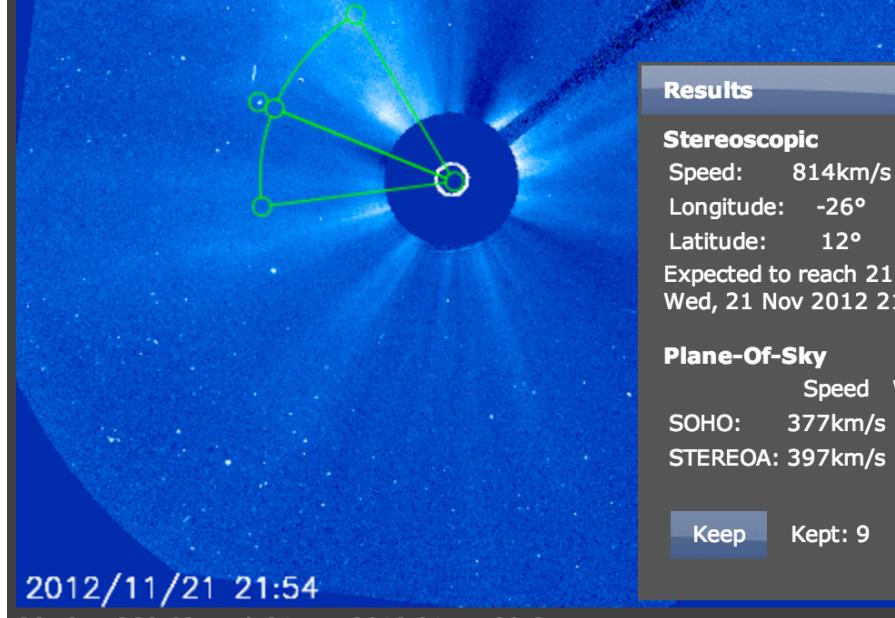


*CME analysis assessment, week two – approximate starting answers*



CME analysis assessment, week two – approximate starting answers

*This is an Earth directed partial halo CME, use triangulation cautiously*



*CME analysis assessment, week two – approximate starting answers*